IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A node device which newly joins a network formed by a plurality of existing nodes, the node device comprising:

a virtual connection establisher unit configured to establish a plurality of virtual connections, each virtual connection being between the node device and one of ~~with~~ the plurality of existing nodes;

~~an average~~ a weighted metric value calculator unit configured to calculate a weighted ~~an average~~ metric value through each of the virtual connections, the weighted metric value corresponding to a plurality of routes to one node of the plurality of existing nodes via one of ~~each of~~ the virtual connections, and the weighted metric value being weighted according to a number of adjacent nodes to the one node; ~~and~~

a total metric value calculator unit configured to calculate a total metric value corresponding to weighted metric values calculated for each of the virtual connections; and

a connection establisher unit configured to establish a connection with [[the]] an existing node of the plurality of existing nodes corresponding to ~~which~~ the virtual connection having a smallest ~~average~~ total metric value ~~is established~~.

Claim 2 (Currently Amended): The node device according to claim 1, further comprising:

an acquirer unit configured to acquire, from any of the plurality of existing nodes, a node-node connection information of an adjacent node to any other of the plurality of existing nodes ~~node~~ forming the network~~, from the any node; and~~ wherein

the ~~average~~ weighted metric value calculator unit is configured to calculate the ~~average~~ weighted metric value in accordance with the node-node connection information.

Claim 3 (Currently Amended): The node device according to claim 2, wherein the node-node connection information includes a node ID for identifying the adjacent node, a metric value of a route between ~~the any node~~ each of the plurality of existing nodes and the adjacent node, and a number of nodes adjacent to the adjacent node.

Claim 4 (Previously Presented): The node device according to claim 3, wherein the metric value includes at least one of a number of hops, network bandwidth, communication costs, delay, load, MTU, or reliability.

Claim 5 (Currently Amended): The node device according to claim 3, wherein the acquirer unit is configured to notify, to ~~the any~~ each of the plurality of existing nodes ~~node~~, a type of a metric value or a combination of metric values to be included in the node-node connection information.

Claim 6 (Currently Amended): A method for generating a network topology in which a new node joins a network formed by a plurality of existing nodes, the method comprising:

establishing a plurality of virtual connections, each virtual connection being between the new node and one ~~each~~ of the plurality of existing nodes;

calculating a weighted ~~an average~~ metric value for each of the virtual connections, the weighted metric value corresponding to a plurality of routes from the new node to one node of the plurality of existing nodes via one ~~each~~ of the virtual connections, and the weighted metric value being weighted according to a number of adjacent nodes to the one node; ~~and~~

calculating a total metric value corresponding to weighted metric values calculated for each of the virtual connections; and

establishing a connection between the new node and [[the]] an existing node corresponding to ~~which~~ the virtual connection having a smallest total ~~average~~ metric value ~~is established, so that the new node joins the network~~.